

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-65. (canceled)

66. (currently amended) A method to acquire a monoclonal antibody or scFv/Fab antibody fragment against a target structure comprising the steps of:

(A) exposing a first mounted tissue to an initial antibody library or scFv/Fab antibody fragment library, wherein the antibody or scFv/Fab antibody fragment is linked to a filamentous phage, a virus, a polysome, or a coded bead comprising an antibody- or scFv/Fab antibody fragment-encoding sequence;

(B) eluting directly from the first mounted tissue unbound elements, wherein the unbound elements comprise a first enriched library; and/or

recovering a second enriched library comprising the filamentous phage, virus, polysome, or coded bead cleaved from bound elements in the first mounted tissue by cleaving the bound elements from ~~a target structure~~ the filamentous phage, virus, polysome, or coded bead in the first mounted tissue such that a monoclonal antibody or scFv/Fab antibody fragment remains bound to the first mounted tissue;

(C) amplifying either the first or second enriched libraries;

(D) exposing the ~~the~~ first or second enriched libraries to a second mounted tissue, wherein the second mounted tissue represents a different physiological or pathological state than the first mounted tissue;

(E) eluting directly from the second mounted tissue unbound elements of the second enriched library from the second mounted tissue, wherein the unbound elements comprise a third enriched library; and/or

recovering a fourth enriched library comprising ~~elements a filamentous phage, virus, polysome, or coded bead of the first enriched library~~ bound to the second mounted tissue section by cleaving the bound elements from ~~a target structure the filamentous phage, virus, polysome, or coded bead of the first enriched library in the second mounted tissue such that the monoclonal antibody or scFv/Fab antibody fragment remains bound to the second mounted tissue;~~

(F) amplifying either the third or fourth enriched libraries; and

(G) isolating ~~an individual element~~ the monoclonal antibody or scFv/Fab antibody fragment from either the third or fourth enriched libraries, ~~wherein the individual element is the monoclonal antibody or the scFv/Fab antibody fragment.~~

67. (previously presented) The method of claim 66 further comprising repeating steps (A) to (G).

68. (previously presented) The method of claim 66 further comprising repeating steps (D) to (G).

69. (previously presented) The method of claim 66 further comprising repeating steps (A) to (C).

70. (currently amended) The method of claim 66 further comprising the step of comparing binding of the ~~individual element~~ antibody or scFv/Fab antibody fragment ~~against the to a target structure of the first and second mounted tissues in the first mounted tissue to binding of the antibody or scFv/Fab fragment to the target structure in the second mounted tissue.~~

71. (previously presented) The method of claim 70, wherein the binding is specific for a physiological process.

72. (previously presented) The method of claim 71, wherein the physiological process is a pathological process, cell development and differentiation, tissue development and differentiation, a drug response, or a naturally occurring degradation process:

73. (previously presented) The method of claim 72, wherein the pathological process is inflammation, a secondary tumor deposit or tumor vasculature.

74. (previously presented) The method of claim 66, wherein the target structure of the first and second mounted tissues is extracellular or intracellular.

75. (previously presented) The method of claim 74, wherein the intracellular target structure is located intranuclear of a nuclear membrane.

76. (previously presented) The method of claim 74, wherein the extracellular target structure is on the cell surface or a molecule released from a cell.

77. (previously presented) The method of claim 76, wherein the cell is a tumor cell.

78. (previously presented) The method of claim 76, wherein the molecule is released actively or passively.

79. (previously presented) The method of claim 70, wherein the target structure is a ligand, a receptor, an adhesion molecule, a matrix associated molecule or a combination thereof.

80. (previously presented) The method of claim 70, wherein the target structure is a protein, a carbohydrate, a nucleic acid or a lipid.

81. (previously presented) The method of claim 66, wherein the first or second mounted tissue is a frozen tissue section or a fixed tissue section.

82. (previously presented) The method of claim 66, wherein the first or second mounted tissue is pretreated with an enzyme or a chemical.

83. (previously presented) The method of claim 82, wherein the enzyme pretreatment is performed with a protease, a polysaccharase, a ribonuclease, a nuclease or a combination thereof.

84. (previously presented) The method of claim 66, wherein the tissue is bone marrow cells, lymph cells, sperm cells or cells from cerebrospinal fluid.

85. (previously presented) The method of claim 66, wherein the initial library is a combinatorial library.

86. (previously presented) The method of claim 85, wherein the combinatorial library is a naive antibody library, a synthetic antibody library, a semi-synthetic antibody library, or a combinatorial library produced by immunizing against one or more target structures.

87. (previously presented) The method of claim 66, wherein step (C) of claim 1 comprises amplifying the bound or unbound elements using bacterial cells, PCR synthesis or chemical synthesis.

88. (currently amended) The method of claim 66, wherein the monoclonal antibody or scFv/Fab antibody fragment of the initial library ~~further comprises antibody identifying sequence information~~ is linked to a filamentous phage or virus.

89. (currently amended) The method of claim ~~88~~ 66, wherein the ~~sequence-identifying information is a nucleic acid or amino acid sequence~~ the antibody or scFv/Fab antibody fragment or the initial library is linked to a polysome or a coded bead.

90. (currently amended) The method of claim 88, wherein the ~~sequence identifying information is in~~ the antibody or scFv/Fab antibody fragment of the initial library is linked to a filamentous phage or a virus.

91. (previously presented) The method of claim 90, wherein the filamentous phage is M13.

92. (previously presented) The method of claim 66, wherein the bound elements recovered in steps (B) or (E) comprise a phage and maintain amplification ability.

93. (currently amended) The method of claim ~~66~~ 91, wherein the cleaving of steps (B) or (E) occurs between minor coat protein pIII and the monoclonal antibody or scFV/Fab antibody fragment.

94. (previously presented) The method of claim 66, wherein the cleaving of steps (B) or (E) is a proteolytic cleavage and occurs at a protease recognition site.

95. (previously presented) The method of claim 94, wherein the proteolytic cleavage is performed by Ala64-subtilisin or blood clotting factor Xa.

96. (previously presented) The method of claim 66, wherein the eluting of steps (B) or (E) is a chemical elution.

97. (previously presented) The method of claim 96, wherein the chemical elution is an acid or alkaline elution.

98. (previously presented) The method of claim 97, wherein the alkaline elution is triethylamine elution.

99. (previously presented) The method of claim 66, further comprising repeating steps (A) and (B) to negatively enrich the unbound elements of the first enriched library or to positively enrich the bound elements of the second enriched library.